

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Appellant: Ingo Hutter
Application No.: 10/531,775
Filed: April 19, 2005
Title: METHOD FOR MANAGING LOGICAL CONNECTIONS IN A
NETWORK OF DISTRIBRUTED STATIONS AS WELL AS A
NETWORK STATION
Examiner: Farhad Ali
Art Unit: 2446
Customer No.: 24498

SUBSTITUTE APPEAL BRIEF

**Mail Stop Appeal Brief - Patents
Commissioner for Patents
P.O. Box 1450
Alexandria, Virginia 22313-1450**

Sir:

In response to the Notice of Non-Compliant Appeal Brief mailed on January 6, 2010, Appellant hereby submits an Substitute Appeal Brief in accordance with 37 C.F.R. §41.37 for the above-referenced application. Appellant also requests an Extension of Time under 37 C.F.R. 1.136(a) to submit this Brief. Deposit Account 07-0832 is being charged for this Extension of Time using EFS-Web. Please charge this Deposit Account for any fees owed in connection with this Substitute Appeal Brief.

No oral hearing is requested.

I. Real Party in Interest

The real party in interest is Thomson Licensing LLC.

II. Related Appeals and Interferences

There are no prior or pending appeals, interferences, or judicial proceedings known to Appellant, the Appellant's legal representative, or assignee which may be related to, directly affect or be directly affected by or have a bearing on the Board's decision in this appeal.

III. Status of Claims

Claims 1-11 are pending in this application.

Claims 1-11 are rejected.

The rejection of claims 1-11 is being appealed.

IV. Status of Amendments

An amendment and Request for Continued Examination dated January 13, 2009 was filed subsequent to the final Office Action of August 13, 2008, and said amendment was entered. In response to said amendment, a non-final Office Action dated April 2, 2009 was issued. No amendment subsequent to the non-final Office Action of April 2, 2009 has been filed.

V. Summary of Claimed Subject Matter

Independent claim 1 defines a method for monitoring audio/video connections hereinafter called AV connections which have been set up in a network of distributed stations which are networked with one another via at least one of a wire-free and a wire bus connections (e.g., page 4, lines 9-16; page 7, lines 1-22), wherein at least two types of stations exist in the network; one type of station being at least one control device for initiating, controlling and removing an AV connection from said AV connections and the other type of station being a controlled device being at least one of an AV server device and an AV renderer device (e.g., page 7, lines 1-22; page 8, line 37 to page 9, line 6; page 10, lines 10-22), wherein between at least two controlled devices said AV connection can be set up by said at least one control device, ("control point device",

page 2; lines 22-26) and when said at least one control device is in a standby mode or in power-off mode (p.11, line 12), a first device (e.g. "set-top box 10", p. 11 li.16-17) of said at least two controlled devices monitors said AV connection to determine whether a second device ("the video recorder 20" p. 11 li.16-17) of said at least two controlled devices, which is AV connected to said first device, has sent a logging-off message whereby when said logging-off message is detected, said first device ends, without an instruction from said at least one control device, the AV connection with said second device (e.g., page 11, lines 1-25).

Independent claim 7 defines a network station (10) for a network of distributed stations which are networked with one another via wire-free or wire bus connections, having means (e.g., "connection manager in the set-top box 10" p. 14, li. 5-6) for setting up an audio/video connection hereinafter called AV connection to another station (e.g., page 7, lines 1-22; page 8, line 37 to page 9, line 6; page 10, lines 10-22), wherein the network station is a controlled device ("media renderer" and "media server" which comprise a connection manager are both controlled devices cf. p.4 li.6-9 and li.16-19) and when a control point device is in a standby mode or in power-off mode, the network station has monitoring means (e.g., element 10 monitoring program which is additionally located in connection manager in the set-top box 10" p. 14, li. 4-6 performing program steps 50-58, cf. p.14 li. 4 to p.15 li. 18) used to monitor whether said another station has sent a logging-off message, and having connection ending means (e.g., monitoring program performing program step 56, cf. p.15 li. 10-17) for autonomously (p. 4, li. 15) ending the AV connection which has been set up when the monitoring means finds that the logging-off message has been sent from said another station, where said connection ending means operates without use of said control point device (e.g., page 11, lines 1-25).

VI. Ground of Rejection to be Reviewed on Appeal

The rejection of claims 1-11 under 35 U.S.C. §103(a) based on U.S. Patent Publication No. 2003/0005130 by Cheng (hereinafter, "Cheng") is presented for review in this appeal.

VII. Argument

The rejection of claims 1-11 under 35 U.S.C. §103(a) based on Cheng should be reversed for at least the following reasons.

Appellant first notes that the present claimed arrangement provides a technique for monitoring audio/video connections (hereinafter called "AV connections") which have been set up in a network of distributed stations. The distributed stations are networked with one another via at least one of a wire-free and a wire bus connection. At least two types of stations exist in the network. One type of station is at least one control device for initiating, controlling and removing the AV connection from the AV connections. The other type of station is a controlled device being at least one of an AV server device and an AV renderer device. Between at least two controlled devices, the AV connection can be set up by the at least one control device. When the at least one control device is in a standby mode, the controlled devices cannot communicate with the at least one control device. To address this problem, the present claimed arrangement advantageously provides that a first device of the at least two controlled devices monitors the AV connection to determine whether a second device AV connected to the first device has sent a logging-off message. When the logging-off message is detected, the first device autonomously ends the AV connection with the second device without an operation from the at least one control device. Cheng neither discloses nor suggests features of the present claimed arrangement.

Cheng describes supporting the communication of audio-video information, and other time-sensitive information, via UPnP networks. The UPnP architecture is augmented to include: a resource management module that supports multiple contenders for a single device or its sub-units without races or hazards, a path manager that provides source-to-sink path management, and an action manager that enables A/V applications to schedule activities. Together, the resource manager and path manager ensure path validity, integrity, and quality of service. The resource manager is configured to manage device resources that are distributed in heterogeneous networks, such as resources distributed in networks using mixed Ethernet, 1394, 802.11, USB, HPNA. The path manager is configured to manage network resources that are

distributed in heterogeneous networks. The resource manager and the path manager are also configured to ensure that a path across network boundaries is valid. Scheduling actions are the responsibility of each action manager, which acts as an agent of the application, and is a client of the resource manager and the path manager. The resource manager and the path manager are configured as an integral part of a UPnP framework, and as such, communicates with applications via HTTP messages (see Abstract).

Cheng is concerned with "provide[ing] a UPnP network management system that controls multiple-contender access to devices and sub-units of devices" (paragraph [0009]). Cheng is not concerned with, nor does it recognize or address, a situation where "at least one control device is in a standby mode" as recited in independent claim 1 of the present arrangement.

On page 4 of the Office Action dated April 2, 2009, the Examiner admits the aforementioned deficiency of Cheng by stating:

"Cheng does not disclose when said at least one control device is in a standby mode." (emphasis original)

In an attempt to remedy this admitted deficiency of Cheng, the Examiner then alleges:

"However, as disclosed in the applicant's specification under Background Of The Invention, 'The control point device initializes and configures both devices for the AV connection, so that the desired data stream can also be sent. Once an AV connection such as this has been set up, the control point device does not need to control the rest of the data transmission, and the UPnP AV specification does not contain any stipulations that the control point must be active all the time throughout the duration of the AV connection that has been set up' (Paragraph [0005]) in order that 'the control point device may also be disconnected from the network' (Paragraph [0005]).

It would have been obvious to one of ordinary skill in the art at the time to create the invention of Cheng to include 'Once an AV connection such as this has been set up, the control point device does not need to control the rest of the data transmission, and the UPnP AV specification

does not contain any stipulations that the control point must be active all the time throughout the duration of the AV connection that has been set up' as taught by the applicant's admitted prior art in order that 'the control point device may also be disconnected from the network' (Paragraph [0005])." (emphasis added)

As indicated above, the Examiner ostensibly alleges that the motivation to modify Cheng is derived from the Appellant's "admitted prior art" in paragraph [0005] of the specification. In response, Appellant submits that the cited passage in paragraph [0005] of the specification is not "admitted prior art" as alleged, but rather, is a description of Appellant's invention itself. That is, paragraph [0005] of the specification containing the aforementioned cited passage is clearly labeled "Invention". Accordingly, the Examiner has attempted to justify a proposed modification to Cheng based on the express teachings of the Appellant, not the prior art. Such a practice is clearly impermissible under Federal Circuit law. See, for example, *In re Laskowski*, 871 F.2d 115, 10 USPQ2d 1397 (Fed. Cir. 1989) ("Although the Commissioner suggests that [the structure in the primary prior art reference] could readily be modified to form the [claimed] structure, '[t]he mere fact that the prior art could be so modified would not have made the modification obvious unless the prior art suggested the desirability of the modification.'" (emphasis added)) and *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984). Accordingly, for this reason alone, Appellant submits that the instant rejection should be reversed.

Given that Cheng does not recognize or address a situation where "at least one control device is in a standby mode", as recited in independent claim 1 of the present arrangement, Cheng also does not address and solve the same problems as the claimed invention. For example, in the present claimed arrangement, when the "control device is in a standby mode," a problem exists in that a second controlled device cannot inform the control device when logging off. To address this problem, the claimed invention provides that "a first device of said at least two controlled devices monitors said AV connection to determine whether a second device of said at least two controlled devices, which is AV connected to said first device, has sent a logging-off message whereby when said logging-off message is detected, said first device ends, without an operation from said at least one control device, the AV connection with said second

device.” In this manner, it is possible according to the claimed invention for the at least one control device to establish a new connection with one of the controlled devices when returning from the standby mode even though the devices could not directly communicate while the control device was in the standby mode. Contrary to the present claimed arrangement, paragraph [0046] of Cheng recites:

“[A]n application or a UPnP system component, such as an action manager 310, issues a resource reservation request ... Every resource manager who receives a reservation request (referred to as an ‘active manager’ below) must ensure the validity of a path, and must participate in the all-or-none reservation process. For this reason, all requests such as RESERVE, RELEASE, SETUP, and TEARDOWN indicate the entire path along which the device and network resources are to be managed. A path is valid only if all the device resources along the path are reachable.”

Therefore, according to Cheng, the resources that make up a path are all checked for validity. The various requests from the resources in a path (i.e. RESERVE, RELEASE, etc.) are managed. However, Cheng is not concerned with and offers no solution for a situation where “at least one control device is in a standby mode” as recited in independent claim 1 of the present arrangement. Rather, Cheng only determines that a path is valid if all the device resources along the path are reachable. This is wholly unlike the present claimed arrangement in which when “at least one control device is in a standby mode ... a first device of said at least two controlled devices monitors said AV connection to determine whether a second device ... has sent a logging-off message whereby when said logging-off message is detected, said first device ends ... the AV connection with said second device.”

Cheng is not concerned with and does not disclose or suggest “whether a second device of said at least two controlled devices, which is AV connected to said first device, has sent a logging-off message” and “when said logging-off message is detected, said first device ends, without an operation from said at least one control device, the AV connection with said second device” as recited in independent claim 1 of the present arrangement. Cheng only describes “an interface for receiving notification about the arrival or departure of a resource ... When the resource manager 320 receives a departure notification, it can either delete the entry, or mark the entry to

indicate the departure of the resource. By marking the entry, the processing required to recreate the entry when the resource returns is avoided" (paragraph [0056]). However, Cheng does not disclose or suggest a situation where "said at least one control device is in a standby mode" as in the present claimed arrangement. When a device is in standby mode, the device is unable to receive any logoff messages. Cheng does not address the problem of a device not being able to log off "when said at least one control device is in a standby mode" at all. Therefore, Cheng cannot autonomously end "the AV connection with said second device" as recited in independent claim 1 of the present arrangement as Cheng is only able to mark an entry to indicate the departure of the resource when the resources are online and in communication with each other. To the contrary, in the present claimed arrangement, "when said at least one control device is in a standby mode, a first device of said at least two controlled devices monitors said AV connection to determine whether a second device of said at least two controlled devices, which is AV connected to said first device, has **sent a logging-off message** whereby when said logging-off message is detected, said first device ends, without an operation from said at least one control device, the AV connection with said second device." Cheng neither discloses nor suggests these features of the present claimed arrangement.

Also on page 4 of the Office Action dated April 2, 2009, the Examiner cites paragraphs [0027], [0037], [0056] and Fig. 3, reference no. 120 of Cheng as being relevant to the present claimed arrangement. Appellant respectfully disagrees. Specifically, paragraph [0027] of Cheng recites "facilitate[ing] efficient and effective transfer of audio-video information, or other time-sensitive information among devices on heterogeneous networks." Paragraph [0037] of Cheng (which is also cited in the "Response to Arguments" section on page 10 of the Office Action dated April 2, 2009) recites:

"... an application is provided the option of managing resource reservation, path setting, and scheduling activities directly, or it can request the action manager 310 to manage these activities. By providing an action manager 310, the application can be free from the concerns of detailed resource management and path management. Preferably, network resources are allocated and the path is set up immediately prior to the time that an action is to take place, to maximize

the use of network resources, although device resources can be reserved well before the effective time by the action manager 310, or the application.”

Paragraph [0056] recites that, “When the resource manager 320 receives a departure notification, it can either delete the entry, or mark the entry to indicate the departure of the resource.”

In response, Appellant submits that the foregoing cited passages of Cheng merely describe how the resource paths are managed. In the case of a departure notification, an entry can be deleted or marked as deleted. However, nowhere in these cited passages or elsewhere in Cheng is there suggestion or disclosure of “when said at least one control device is in a standby mode, a first device of said at least two controlled devices monitors said AV connection to determine whether a second device of said at least two controlled devices ... has sent a logging-off message” and “when said logging-off message is detected, said first device ends, without an operation from said at least one control device, the AV connection with said second device” as recited in independent claim 1 of the present arrangement. The departure notification in Cheng must be communicated only when the all parties in the path and the receiving source are online and able to communicate. Cheng is not able to “end ... the AV connection with said second device” in the case “when said at least one control device is in a standby mode” as recited in independent claim 1 of the present arrangement. Rather, any departure message is only communicated when all resources are online and in communication. Moreover, Fig. 3, reference no. 120 may include the various modules, as argued on page 4 of the Office Action dated April 2, 2009. However, these modules are unable to “to determine whether a second device of said at least two controlled devices, which is AV connected to said first device, has sent a logging-off message whereby when said logging-off message is detected, said first device autonomously ends, without an operation from said at least one control device, the AV connection with said second device” in the case “when said at least one control device is in a standby mode” as recited in independent claim 1 of the present arrangement.

Accordingly, for at least the foregoing reasons, Appellant respectfully submits that Cheng does not render independent claim 1 of the present arrangement obvious.

Consequently, reversal of the rejection of independent claim 1 under 35 U.S.C. 103(a) is respectfully requested.

Claims 2-6 are dependent on independent claim 1 and therefore, these claims are considered patentable for at least the same reasons presented above with respect to independent claim 1. Consequently, reversal of the rejection of claims 2-6 under 35 U.S.C. 103(a) is respectfully requested.

Independent claim 7 includes similar features as independent claim 1 and is considered patentable over Cheng for at least the same reasons presented above with respect to independent claim 1. Consequently, reversal of the rejection of independent claim 7 under 35 U.S.C. 103(a) is respectfully requested.

Claims 8-11 are dependent on independent claim 7 and therefore, these claims are considered patentable for at least the same reasons presented above with respect to independent claims 1 and 7. Consequently, reversal of the rejection of claims 8-11 under 35 U.S.C. 103(a) is respectfully requested.

Respectfully submitted,
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VIII. Claims Appendix

1. A method for monitoring audio/video connections hereinafter called AV connections which have been set up in a network of distributed stations which are networked with one another via at least one of a wire-free and a wire bus connections, wherein

at least two types of stations exist in the network; one type of station being at least one control device for initiating, controlling and removing an AV connection from said AV connections and the other type of station being a controlled device being at least one of an AV server device and an AV renderer device, wherein

between at least two controlled devices said AV connection can be set up by said at least one control device, and when said at least one control device is in a standby mode, a first device of said at least two controlled devices monitors said AV connection to determine whether a second device of said at least two controlled devices, which is AV connected to said first device, has sent a logging-off message whereby when said logging-off message is detected, said first device ends, without an instruction from said at least one control device, the AV connection with said second device.

2. The method as claimed in claim 1, wherein when said first device is AV connected to said second device, said first device sends a signaling request to the stations in the network when the AV connection has remained unused for a first specific time, and when the signaling request remains unanswered by the second device which is AV connected to the first device, the first device autonomously ends the setting up of the AV connection.

3. The method as claimed in claim 1, wherein when a new connection request arrives, a station from which an AV connection to another station has already been set up, sends a signaling request to the stations in the network and in that, in the situation where the signaling request remains unanswered by the station which is AV connected to the requesting station, the requesting station autonomously internally ends the setting up of the AV connection.

4. The method as claimed in claim 3, wherein, in the situation in which it is found that the other station on the AV connection which has been set up is still registered in the network, the logical connection has remained unused for a second specific time, the station which is carrying out the check autonomously internally ends the setting up of the existing AV connection.

5. The method as claimed in claim 1, wherein at least one of audio and video data is transmitted via the AV connection.

6. The method as claimed in claim 1, wherein the data transmissions in the network are carried out in accordance with the rules of the UPnP Standard.

7. A network station for a network of distributed stations which are networked with one another via wire-free or wire bus connections, having means for setting up an audio/video connection hereinafter called AV connection to another station, wherein the network station is a controlled device and when a control point device is in a standby mode, the network station has monitoring means used to monitor whether said another station has sent a logging-off message, and having connection ending means for autonomously ending the AV connection which has been set up when the monitoring means finds that the logging-off message has been sent from said another station where said connection ending means operates without use of said control point device.

8. The network station as claimed in claim 7, wherein the monitoring means are also designed to:

monitor whether the AV connection which has been set up has remained unused for a first specific time and, if so, sending a signaling request to the stations in the network, and

autonomously internally ending the setting up of the existing AV connection if the signaling request remains unanswered by the station which is AV connected to a requesting station.

9. The network station as claimed in claim 7, wherein the monitoring means is designed to send a signaling request to the network of distributed stations when a new connection request for a further station has arrived and it has been found that the AV connection which has been set up has been unused for that time, with autonomous ending of the setting up of the existing AV connection when the signaling request remains unanswered by the station which is AV connected to a requesting station.

10. The network station as claimed in claim 9, wherein the monitoring means are also designed such that they end the setting up of the existing AV connection autonomously when it is found that said another station in the AV connection which has been set up is admittedly still registered in the network, but that the AV connection has remained unused for a second specific time.

11. The network station as claimed in claim 7, wherein the network station is designed for data transmissions in accordance with the UPnP Standard.

IX. Evidence Appendix

None.

X. Related Proceedings Appendix

None.